



## Posture Perfect by Chaney Stiglich *RehabWorks Intern*

We all remember our mothers telling us to “sit up straight”, “don’t slouch” and “put your shoulders back”. Well, turns out, once again Mom was right. Good posture is more than cosmetically pleasing; the ramifications of good posture go far beyond good looks. Your posture reflects the dynamic movement of the human body and frame.

We are a very health conscience society today. Without good posture your overall health and total effectiveness may be compromised. Because the long term effects of poor posture can effect a number of body systems, a person with poor posture may often be tired or unable to work efficiently or move properly. Poor posture can effect functions such as digestion, elimination, breathing, muscles, joints and ligaments. Unfortunately, the importance of good posture is overlooked by fitness advisors and fitness seekers alike.

Good posture is the maintenance of the three normal curvatures of the spine. The neck (cervical), thoracic (mid-back) and lumbar (lower back) curves should be aligned and balanced. A lifetime of poor posture can start a progression of symptoms in the average adult life. In most cases poor posture is a combination of several factors. Bad posture can be caused by environmental factors or bad habits. That means that you are in charge.

Today, posture related problems are increasing:

- 1) As we become a society that watches more television than any previous generation.
- 2) As we become a more electronically oriented society, more and more people are working sedentary desk jobs or sitting in front of computer terminals.
- 3) As more cars are crowding the roadways, causing more accidents and injuries.
- 4) As we drive more often in cars with poorly designed seats.

Often, because we have had bad posture for so long, we no longer remember what good posture looks like. Perfect standing posture is when the following are properly aligned-the points between your eyes, chin, collarbone, breastbone, pubic area and the midpoint between your ankles. From the side, you can easily see the three curves of your spine. When observing from the front, your shoulders, hips and knees should be at the same height and your head should be straight, not bent forward or tilted to one side. Obviously, no one spends the entire day in this position, but if you naturally assume a relaxed standing position, you will carry yourself in a more balanced position and have less stress in your other activities.

Improper sitting posture can cause a vast array of injuries and pain. An improper sitting posture can be characterized by a rounded or humped upper back, forward

head position and rounded lower back. This detrimental posture usually begins as early as adolescence or teenage years. Sagging sitting posture can cause the abdominal organs to sag, causing crowding and making more work for the heart and lungs. Poor sitting posture can also limit your range of motion, create pain in the jaw and low back, decrease lung capacity, cause nerve interference and affect proper bowel function.

Now that you know what bad posture looks like and how it can effect your life, how do you correct it? In a way, correct posture only takes a little time and attention. The best way to correct the way that you sit and stand is to pay attention and take notice. Poor sitting and standing posture is a bad habit that is learned, a habit that is possible to change with a little effort.

To improve your standing posture, hold your head high, chin firmly forward, shoulders back, chest out and stomach tucked in to increase your balance. If you stand all day in an occupation such as a clerk or cashier, rest one foot on a stool or take breaks to get off of your feet for a while. By gently lifting your chest, your head and shoulders will come back into the proper position without straining the muscles of the neck and back. Improving the standing posture will also allow you to stand for longer periods of time without suffering from low back or leg pain.

Sitting posture is not only dependent on the person, but environmental factors that come into play also. When sitting, use a chair that has a firm low back support. To decrease pain when prolonged sitting is necessary, keep the table top or desk at elbow height, adjust the chair or use a foot rest to keep pressure off of the back of the legs and keep your legs a little higher than your hips. Because there are a greater number of occupations that require prolonged sitting, desk work or computer work, correct sitting posture is crucial to maintaining health and avoiding increased pain.

Finally, here are a few overall tips to consider when addressing correct posture and body mechanics:

- Maintain the three natural curves of your back by being constantly aware of your posture.
- Avoid excessive swayback at all times.
- Help avoid unnecessary back strain by keeping your weight down and exercising regularly to build strong supporting muscles.
- Use proper lifting techniques.
- Change positions frequently during the day, breaking up long tasks into shorter segments.
- Sleep on a firm mattress, either on your back or side.
- Don’t slouch or bend forward when driving or sitting.
- Stay fit and trim. Exercise regularly.

Staying healthy and pain free is a choice that we all make. In today’s hectic and high stress society it is imperative that we take good care of ourselves. Good posture is not only a way to decrease pain, increase your movement and effectiveness, it looks much better and will make you feel better. Follow these simple tips on posture and be aware of your body mechanics and you, too, can be “Posture Perfect”.

Sources:

<http://www.uthscsa.edu/mission/spring95/posture.html>

<http://www.firstchiro.com/26postu.htm>

<http://www.miya.cs.it-chiba.ac.jp/zaken/zakenhp/atogakien.html>

<http://www.drjulie.com/posture.htm>



## The Tales of the Scale

So you’ve decided you want to get in shape. If you’re like most Americans, the first thing you’ll do is seek out a scale. But relying on the scale to tell you if you’re at an appropriate body weight can be very frustrating. You must have a good understanding of what the scale does and does not tell you to keep its information in perspective.

### The Difference Between Fat and Muscle

When you step on a scale you get a measurement of your total body weight. Focusing on total body weight is problematic because you don’t know how many of those pounds are from fat (percent body fat). You might have heard that muscle weighs more than fat, but that’s not true. A pound of muscle weighs the same as a pound of fat: one pound. However, muscle is much denser than fat, so a pound of fat takes up more space on your body than a pound of muscle.

### Realize The Facts

To obtain and maintain a healthy body, the best workout program is a combination of cardiovascular exercise, weight training and adequate-calorie eating. While cardiovascular exercise and caloric restriction will help you lose fat, weight training will help you gain muscle. So if the scale is your only reference point, you will probably get frustrated because you are not losing as much total body weight as your friends who are just “dieting.” But truth be known, you are making positive changes.

If you based your exercise program on the scale’s numbers, you might be tempted to skip weight training, and that would be a mistake. Additional muscle not only helps your strength, but it also increases your metabolism. In time, some added pounds of muscle could be responsible for burning thousands and thousands of extra calories! Women, take note: adopting a weight training program does not mean you will transform into the female version of The Incredible Hulk. “Bulking up” is a difficult process for women and cannot be accomplished without a very regimented program. In other words, women who get big muscles aim to get that way - it doesn’t happen accidentally, or with the average weight training program.

### Instead Of The Scale...

Remember that your body weight can fluctuate daily by several pounds. This is due to the amount of water in your body, meals you eat and in women, hormones. Instead of weighing yourself every day, assess your progress by the way you look and how your clothes fit. If you must know your body weight, check it no more than once every week or two.



## March: National Nutrition Month

**Lunch and Learn:** “Eat To Live Instead Of Live To Eat” March 12th and 26th at 12pm. Learn how to eat what your body needs, not what your mouth craves! Call 867-7829 for the location and to sign up.

**Exercise and Pregnancy Workshop:** March 18th, 5:00 p.m. You and your baby deserve good health! Learn proper nutrition, exercise recommendations and pre-and post-natal health according to the American College of Obstetrics and Gynecology. Call 867-7829 to register.

**Indy 100 Incentive Program:** March 22nd - May 30th Gear up and get fit with our new incentive program! All participants will be assigned a race car and progress will be logged on a race track at each Fitness Center. Stop by either Fitness Center for details and to join the race for fitness. On your mark, get set, GO!

**All Fired Up Relay Race:** It’s time to get All Fired Up for FITNESS! The first ever All Fired Up Relay Race will be held on Tuesday, March 23rd at 5 p.m. in front of the O&C building. Each team must consist of four members, with men’s, women’s, and co-ed (two men, two women) divisions. Teams must register at the O&C Fitness Center by March 19th.

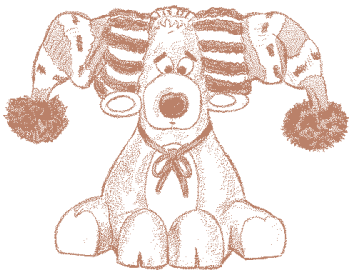
## April: National Humor Month

**Lunch and Learn:** “Stress Busters” April 9th and 23rd at 12 p.m. Learn techniques to combat stress! Call 867-7829 for the location and to sign up.

### Weight Management Program:

April 6th - May 25th, every Tuesday from 5:00 - 6:00pm

KSC Fitness Centers present HEALTHY HABITS! This 8-week weight management program includes classes on EXERCISE, NUTRITION and BEHAVIOR MODIFICATION. Call the Fitness Center for more information or to sign up-reservations required. It’s not a diet, it’s HEALTHY HABITS for a Lifetime!





Join the Club

By: Jim Thompson

Are you over 40? Are you a bit on the heavy side? Did you have a baby over 9 lbs? If you said yes to several of these questions you have the credentials to join the club (note: if you are a man and answered yes to the last one I know some people who really, really, want to meet you). Now, to give affirmative action an interesting twist; are you African-American? How about Hispanic? Maybe Native American? If yes, your credentials just got better. The catch is, you don't especially want to join up. Doesn't matter, I'm a member and except for the honor, would have preferred to pass, too. It means, sport, that you are becoming prime for diabetes. About half who have it know it, the other half don't, and usually find out by having parts of their bodies quit working or fall off.

The good news is that you can probably control diabetes if you know what it is and what to do about it. You can't get rid of it and you can't fix it, but you can keep it from doing bad things. If you haven't had regular physical exams by your doctor, you would be well advised to, and have your medic go over the results with you. Maybe you are fine there, most people are - but if you start getting into club eligibility, it may only be a matter of time. If you can get it before it gets you, great, but otherwise you would be well served to stop diabetes dead in its tracks. Our friendly folks in the Occupational Health Facility have stuff on this, plus things about your heart (those of you that have one) and a few other things. Unless you have some way of getting another body, it may be best to take care of the one you have. You can visit the medical clinics or call 867-3346.

By the way, one of the things that works best to control the problem (actually a lot of problems) is exercise. Not much is disgustingly healthy as sweat through moderate exertion. If you haven't gone there, the KSC Fitness Centers (in the O&C and OSB) are waiting. They do want some forms from you so our medics can certify that you won't keel over on them, but that is easy to check out. Drop by or give them a call at 867-7829 or 861-3028 and see what they've got.

ATTITUDE

by Charles Swindoll

“The longer I live, the more I realize the impact of attitude on life. It is more important than the past, than education, than money, than circumstances, than failures, than successes, than what other people think or say or do. It is more important than appearance, giftedness or skill. The remarkable thing is — we have a choice every day of our lives regarding the attitude we embrace for that day. We cannot change our past. We cannot change the fact that people will act in a certain way. We cannot change the inevitable. The only thing we can do is play on the one string we have, and that is our attitude. I’m convinced that life is 10% what happens to me, and 90% how I react to it. And so it is with you. We are in charge of our attitudes.”

Ask Miss Muscle

**Q:** Are there any Internet sites that can analyze foods for calories and other nutrients?

**A:** Yes! Here are four good, free sites: Nutrition Analysis Tool (spectre.ag.uiuc.edu/~food-lab/nat), sponsored by the University of Illinois Department of Food Science; Diet Analysis Home Page (dawp.anet.com), by Chris Roberts, a computer professional; Nutribase (www.nutribase.com), by CyberSoft, Inc.; and CyberDiet’s Home Page (www.cyberdiet.com), by Timi Gustafson, RD, and Cynthia Fink.

Realize that nutrition analyses can be time-consuming. You may need to break a food into its individual “parts”, such as bread, tuna, mayonnaise and eggs for a tuna salad sandwich. Also, exact quantity options and food matches can be restrictive. Overall, however, each site is a very useful tool for nutrition analysis.

Source: Tufts University Health and Nutrition Letter, Sept. 1998

**Did you know...**Forty percent of five- to eight-year-olds in the United States have at least one risk factor for heart disease.

Coming of Age

The telltale signs are there - gray hairs, less stamina, vision problems...It looks like you're not going to stay young forever. You can't turn back the hands of time, but you can slow them down. Check out these seven suggestions for staying fit over 40:

- 1. Keep moving.** Physical activity is the closest thing to a magic pill that we have available. It reduces your risk of serious disease and slows the aging process. You're never too old to start exercising!
- 2. Build muscle mass.** Lack of strength is a primary health hazard of aging. Regular strength training aids balance, mobility and stamina for all the physical demands of everyday living.
- 3. Enjoy natural foods.** Eating whole grains, fruits and vegetables every day can help you maintain proper weight, energy and immunity to disease.
- 4. Get regular check-ups.** After age 40, adopt a preventive maintenance program with your doctor. Regular breast, prostate and cholesterol checks, for example, are vital in monitoring your health changes.
- 5. Be optimistic.** Attitude and emotional health can have a major impact on your physical state. When you choose to look on the bright side, life can be less stressful and more rewarding.
- 6. Be social.** Whatever the connection, positive interaction with others seems to promote health, particularly as we age. Find time to laugh, share thoughts and have fun with close friends.
- 7. Refuse to act your age.** Instead of thinking, "I'm too old for that," learn to welcome and explore new opportunities. Studies show people who age well are those who remain productive, involved in the community and interested in life.

Source: Personal Best, Sept. 1998

All the More Reason

By: Susannah Johnson-Cooper

On a typical weekday morning, you go to the gym for your usual four miles on the treadmill, then you jump on some free weights before showering and heading off to work. Only today you leave work early to stop by your doctor's office for a routine examine brought on by some extra fatigue you've been feeling. The good news is...you're pregnant! Happy thoughts are racing through your head until you get to the fitness section of your brain. Red flags go up and you immediately wonder how much you'll have to change your fitness routine. Well, not to worry. There is plenty of room for exercise in the pregnant woman's day!

The American College of Obstetrics and Gynecology (ACOG) and the American College of Sports Medicine (ACSM) have put in plenty of hours researching this subject to determine what is safe and effective for expectant moms to include in their program. However, human studies are limited on this subject due to the ethical concerns. The following guidelines are the current standards.

In 1985, the ACOG recommended a pregnant woman raise her heart rate no higher than 140 beats per minute during exercise and that the body temperature remained at 100.4° F or less. The guidelines were revised in 1994 to account for the higher percentage of women leading physically active lives. The current recommendation states that women "can exercise moderately to maintain cardiorespiratory and muscular fitness throughout pregnancy and the postpartum period." Be sure to check with your doctor before exercising while pregnant.

Some general guidelines for the average active woman include:

1. Increasing fluid intake to higher than normal and maintaining adequate hydration.

2. Always wearing proper clothing to promote staying cool and exercising indoors on hot days.
3. Staying away from exercise if experiencing febrile illness (if you are sick!).
4. Avoiding supine (on your back) exercises after the fourth month.
5. Repetitive bouncing and jerking movements should be avoided, especially during 3rd trimester.
6. Activities that may cause low oxygen levels, such as mountain climbing, sky diving and SCUBA diving should be avoided.
7. Complex carbohydrates should be emphasized in the diet to replace muscle glycogen after exercise and avoid fetal ketosis.
8. Athletic competition increases the risks to the mother andthe baby, but are allowed at mom's discretion.

Some conditions require more caution on the expectant mother's part. These include: congestive heart failure, valvular heart problems, uterine bleeding, anemia, thyroid disease, medicine controlled diabetes, breech position in the 3rd trimester, multiple births, hypertension and excessive weight gain or loss. Anyone with any of these conditions should follow all recommendations of her doctor.

Here at the KSC Fitness Centers, we encourage all expectant mothers to exercise safely and within the guidelines presented by their own doctors. If you're not sure what exercises to do or would like some modifications to your current fitness program, call the Fitness Centers at 867-7829 (O&C) or at 861-3028 (OSB). So enjoy your pregnancy and your exercise program- your baby deserves the healthiest you ever!

Exercise of the Month: Dumbbell Shrugs

Your Trapezius muscle is a triangle shaped muscle that attaches your neck to your shoulders and upper back. As such, it's one of the major stabilizers in you back. The stronger and more balanced your Trapezius, the straighter you can stand.

Trapezius strengthening is especially important for those who sit at a desk all day long. That's because repetitive forward motions, like working at a computer, can make your shoulders droop. Dumbbell shoulder shrugs can help you reverse the slump.

Because of this, shoulder shrugs are often called the 10-pound exercise. If you strengthen your Trapezius, your improved posture will make you look as if you've lost 10 pounds. Here's how:

**POSE:** With a dumbbell in each hand (start with a 3-5 pound weight), let your arms hang relaxed by your

side, palms facing in. Put one foot slightly in front of the other. Keep both feet flat on the floor. Slightly bend both knees and lean your upper body slightly forward from the hips.

**MOVE:** Shrug your shoulders. Hold for one second, then release. This has also been called the "I don't know" exercise. Simply shrug as if you're saying "I don't know."

**REPEAT:** 12 times, one or two sets. Rest one minute in between sets.

**VARIATION:** In addition to dumbbell shrugs, you might want to roll your shoulders forward or backward.

Your trapezius muscle is extremely powerful, so don't be surprised if you improve quickly.

Source: Mayo Clinic HealthQuest newsletter